IHS Best Practice Model
Kidney Disease

Early intervention in patients with chronic kidney disease is effective is slowing the progression of disease, reducing co-morbidity, and improving the quality of life of people who eventually progress to endstage renal disease (dialysis or transplantation).

The Purpose Of A Kidney Disease Program/Initiative is to:

- Identify patients at risk for progression of renal disease or patients with reversible conditions
- Promote the recognition of abnormal renal function
- Slow the progression of renal disease
- Prevent or treat metabolic, hematologic, and cardiovascular abnormalities
- Describe the referral points to specialty care
- Preparation of the patient for ESRD at an appropriate time

Suggested Elements of a Kidney Disease Program/Initiative:

- Community screening or screening of family members of persons with kidney disease
- Establishment of a kidney disease registry to promote follow-up
- Focused clinical outreach to treat:
  - Hypertension
  - Hyperlipidemia
  - Metabolic bone disease
  - Anemia
- Nutrition intervention to slow progression of kidney disease and/or decrease malnutrition in patients with progressive kidney disease
- Patient and family education program on progressive kidney disease, endstage renal disease, renal replacement therapy (dialysis and transplantation)
- Rehabilitation program for patient with kidney failure (vocational training, physical training, psychosocial intervention)
- Program to increase awareness of organ donation and transplantation in the community

Existing Models:

- Albuquerque Area IHS Kidney Disease Program
- Kidney Early Education Program (KEEP) of the National Kidney Foundation
- Renal Rehabilitation Institute

Recommendation for Evaluation

Data Elements

- Rates of proteinuria, rates of blood pressure control; decrease incidence of CV events (CAD, stroke, lower extremity peripheral disease) improved glycemic control, decrease incidence of smoking, improved nutritional status,
- Incident dialysis patients: number, clinical and biochemical parameters at the time of initiation: Hgb, vascular access, transplant and home dialysis rates

Technical Review Criteria:

- Adequate resources to accomplish stated goals
- Realistic goals based on recruitment, physiology
- Clear entry/screening criteria
- Clear indicators for outcome (BP, proteinuria, adequate Hgb)
- Adequate data collection and analysis
- Plan for implementing findings/results to broader community/after special funding ends

Scientific Evidence:

- US Renal Data System: Excerpts from the USRDS 2000 Annual report: Atlas of End-Stage Renal Disease in the United States. Am J Kidney Dis 36:S1-S239, 2000 (suppl 2).

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- Minimizing the Progression of Kidney Disease. Flack J, editor. American Journal of Kidney Disease 2000, 36: suppl 1

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- UK Prospective Diabetes Study Group: Tight blood pressure control and risk of macrovascular and microvascular complications in type 2 diabetes. UKPDS 38. BMJ 317:703-713, 1998

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- American Diabetes Association, Clinical Recommendations, Diabetes Care, Vol. 24, Supplement 1, 2001

- New England Journal of Medicine 1994; 330: 877-884. Klahr S et al. The effects of dietary protein restriction and blood pressure control on the progression of chronic renal disease.

- Healthy People 2010 – Chapter on Chronic Kidney Disease

- Obrador, GT, et al. J Am Soc Nephrol 1998 9:S44-54. Optimal Chronic Kidney Disease Patient Care

- Obrador, GT, et al J Am Soc Nephrol 1999 10:1793-1800 Prevalence of and Factors Association with Suboptimal Care Before Initiation of Dialysis in the U.S.

- Gerstein, H.C et al (HOPE Study Investigators) Diabetes Care Vol 23 Supl.2: B35-B39, 2000. Prevalence and Determinants of Microalbuminuria in High-Risk Diabetic and Nondiabetic Patients in the Heart Outcomes Prevention Evaluation Study.

Lessons Learned/Best Practice Models:

- Narva, A. (1999). Caring for the patient with progressive renal disease. In Galloway, JM, Goldberg, BW, Alpert, JS, (eds). Primary Care of Native American Patients, Butterworth-Heinemann, Boston, p. 183-189.
- Kuracina,T, Narva, A. (1997). Nutrition and kidney disease workshop: increasing knowledge and skills among nutrition professionals who serve American Indians/Alaska Natives. Journal of Renal Nutrition 7,212-215.
- The National Kidney Foundation will publish practice guidelines for the management of patients with chromic kidney disease (KDOQI) during the summer of 2001. These will define a national best practices standard.
- Albuquerque Area Renal Clinics are a model of early intervention using a collaborative approach including nutritionists, pharmacists, nurses, community health workers
- Collaboration between tribes and Kidney Foundation in Oklahoma is model to make things happen for public and health provider awareness – Jeff Tallent, Director, National Kidney Foundation of Oklahoma (405-947-6405) can provide more information.
- KEEP – a National Kidney Foundation program for screening in high risk communities – look at risk factors for kidney disease and heart disease
- Ft. Peck Model – Using "staged kidney management" approach. Having stages of kidney disease defined with specified education to occur at each stage. Having protocols for nurses/RD's to do intervention. (Lab work, consults, etc.)
- Multi-disciplinary teams do better job in caring for patients with chronic kidney disease – Physician, Community Health Nurse, Dietitian, Mental Health, Business Office (Benefits Coordinator for coverage), Pharmacist, and of course, the patient and family members.
- Education for primary care providers to feel comfortable with treating patients
- Provide expertise in kidney disease for all members on the team
- Nephrologist should be considered consultant rather than primary provider
- Pre-dialysis is not a good term – Chronic Kidney Disease
- Don't have doctors solely responsible for implementing program – use mid-level providers – FNP, PA, CHN, RD
- Use performance improvement studies to show primary providers level of control, diabetes audit information
- Use of patient contracts – enhances patient care.
- Public Health Problem – Indian Health Service is set up to define and implement programs.